

Flour Milling: 2002

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2002 Economic Census

Manufacturing

Industry Series



U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
311211, Flour milling	2002 ..	213	340	11 636	448 597	8 418	18 375	285 845	2 003 868	4 922 509	6 905 731	154 134
	2001 ..	N	N	11 617	418 522	8 610	19 193	268 803	1 684 364	4 568 524	6 255 569	119 134
	2000 ..	N	N	12 599	441 371	9 581	20 020	293 275	2 116 021	4 498 712	6 612 109	196 897
	1999 ..	N	N	12 058	410 917	8 881	19 108	271 170	1 666 108	4 592 758	6 270 602	168 998
	1998 ..	N	N	10 892	392 853	8 043	17 993	266 705	1 863 965	5 471 831	7 359 803	185 013
	1997 ..	254	382	12 762	444 182	9 287	20 386	296 258	1 894 615	6 099 513	8 001 978	196 633

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
311211, Flour milling												
United States.....	—	340	168	11 636	448 597	8 418	18 375	285 845	2 003 868	4 922 509	6 905 731	154 134
Colorado	—	7	1	115	5 787	87	202	4 037	54 026	64 839	118 090	2 269
Kentucky	—	5	3	149	4 390	91	193	2 562	16 308	40 830	55 722	999
Michigan	—	13	7	663	28 730	490	992	17 908	97 202	137 010	232 616	3 537
Minnesota	—	16	12	599	24 630	496	1 056	19 080	108 348	346 374	453 685	9 651
North Carolina	1	19	6	459	16 144	319	685	9 979	50 577	153 259	204 008	5 167
Oklahoma	—	6	5	505	17 672	409	920	11 755	50 756	130 288	179 058	3 110
Oregon	—	5	2	107	4 937	78	186	3 305	10 204	44 366	53 871	1 778
Utah	—	8	5	254	8 927	170	369	5 777	34 530	93 375	128 053	1 429
Wisconsin	—	9	3	234	7 947	192	404	5 679	34 320	137 285	170 650	4 622

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
311211, Flour milling	
Companies ¹	number.. 213
All establishments ²	number.. 340
Establishments with 1 to 19 employees.....	number.. 172
Establishments with 20 to 99 employees.....	number.. 142
Establishments with 100 employees or more.....	number.. 26
All employees ³	number.. 11 636
Total compensation.....	\$1,000.. 544 698
Annual payroll.....	\$1,000.. 448 597
Total fringe benefits.....	\$1,000.. 96 101
Production workers, average for year.....	number.. 8 418
Production workers on March 12.....	number.. 8 347
Production workers on May 12.....	number.. 8 227
Production workers on August 12.....	number.. 8 558
Production workers on November 12.....	number.. 8 469
Production worker hours.....	1,000.. 18 375
Production worker wages.....	\$1,000.. 285 845
Total cost of materials.....	\$1,000.. 4 922 509
Materials, parts, containers, packaging, etc., used.....	\$1,000.. 4 561 904
Resales.....	\$1,000.. 204 728
Purchased fuels.....	\$1,000.. 31 578
Purchased electricity.....	\$1,000.. 119 919
Contract work.....	\$1,000.. 4 380
Quantity of electricity purchased for heat and power.....	1,000 kWh.. 2 177 602
Quantity of electricity generated less sold for heat and power.....	1,000 kWh.. D
Total value of shipments.....	\$1,000.. 6 905 731
Primary products value of shipments.....	\$1,000.. 6 432 495
Secondary products value of shipments.....	\$1,000.. 143 928
Total miscellaneous receipts.....	\$1,000.. 329 308
Value of resales.....	\$1,000.. 324 515
Contract receipts.....	\$1,000.. D
Other miscellaneous receipts.....	\$1,000.. D
Primary products specialization ratio.....	percent.. 98
Value of primary products shipments made in all industries.....	\$1,000.. 6 683 757
Value of primary products shipments made in this industry.....	\$1,000.. 6 432 495
Value of primary products shipments made in other industries.....	\$1,000.. 251 262
Coverage ratio.....	percent.. 96
Value added.....	\$1,000.. 2 003 868
Total inventories, beginning of year.....	\$1,000.. 492 754
Finished goods inventories.....	\$1,000.. 87 894
Work-in-process inventories.....	\$1,000.. 11 134
Materials and supplies inventories.....	\$1,000.. 393 726
Total inventories, end of year.....	\$1,000.. 581 971
Finished goods inventories.....	\$1,000.. 104 229
Work-in-process inventories.....	\$1,000.. 15 445
Materials and supplies inventories.....	\$1,000.. 462 297
Gross value of depreciable assets (acquisition costs) at beginning of year.....	\$1,000.. 2 708 573
Total capital expenditures (new and used).....	\$1,000.. 154 134
Buildings and other structures (new and used).....	\$1,000.. 30 297
Machinery and equipment (new and used).....	\$1,000.. 123 837
Automobiles, trucks, etc., for highway use.....	\$1,000.. 4 039
Computers and peripheral data processing equipment.....	\$1,000.. 5 661
All other expenditures for machinery and equipment.....	\$1,000.. 114 137
Total retirements.....	\$1,000.. 116 266
Gross value of depreciable assets at end of year.....	\$1,000.. 2 746 441
Depreciation charges during year.....	\$1,000.. 137 458
Total rental payments.....	\$1,000.. 48 988
Buildings and other structures.....	\$1,000.. 17 220
Machinery and equipment.....	\$1,000.. 31 768
Total other expenses ⁴	\$1,000.. 189 638
Response coverage ratio ⁵	percent.. 91
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 65 649
Communications services ⁴	\$1,000.. 3 683
Legal services ⁴	\$1,000.. 1 114
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 791
Advertising and promotional services ⁴	\$1,000.. 1 256
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 1 086
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 3 117
Management consulting and administrative services ⁴	\$1,000.. 1 778
Taxes and license fees ⁴	\$1,000.. 12 462
All other expenses ⁴	\$1,000.. 98 704

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
311211, Flour milling											
All establishments	—	340	11 636	448 597	8 418	18 375	285 845	2 003 868	4 922 509	6 905 731	154 134
Establishments with—											
1 to 4 employees	9	91	180	6 561	135	280	4 461	18 135	72 279	90 370	3 333
5 to 9 employees	7	31	208	7 589	157	338	5 061	19 848	69 005	88 674	2 830
10 to 19 employees	1	50	737	29 647	558	1 239	20 507	98 767	345 669	442 926	9 841
20 to 49 employees	—	98	3 095	124 869	2 291	5 113	82 690	561 697	1 942 949	2 497 074	59 076
50 to 99 employees	—	45	3 135	121 725	2 224	4 844	76 287	566 606	1 547 611	2 106 045	46 058
100 to 249 employees	—	24	h	D	D	D	D	D	D	D	D
250 to 499 employees	—	2	f	D	D	D	D	D	D	D	D
500 to 999 employees	—	—	—	—	—	—	—	—	—	—	—
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	97	266	10 250	207	451	7 147	29 628	122 529	152 158	5 427

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
311211	Flour milling	340	11 636	448 597	8 418	18 375	285 845	2 003 868	4 922 509	6 905 731	154 134
3112111	Wheat flour, except flour mixes, made in flour mills	153	6 720	274 057	4 989	11 127	183 387	1 226 361	3 784 154	4 991 319	100 975
3112114	Wheat mill products, except flour ...	4	288	9 635	232	545	6 232	35 370	36 400	71 632	5 507
3112117	Corn mill products	31	2 095	77 819	1 304	2 816	41 566	453 115	603 699	1 056 407	23 993
311211A	Prepared flour mixes (including refrigerated and frozen doughs and batters), made in flour mills	19	1 469	50 941	1 056	2 116	29 824	167 413	204 168	371 321	11 236
311211B	Other grain mill products	13	461	17 192	350	739	11 304	74 663	122 338	197 069	4 966

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
311211	Flour milling	2002.. N	X	X	6 683 757
	1997.. N	N	X	X	7 837 086
3112111	Wheat flour, except flour mixes, made in flour mills	2002.. N	X	X	4 339 890
	1997.. N	N	X	X	5 146 612
31121111	Commercial dollar exports, all white flour types, made in flour mills	2002.. N	X	X	49 851
	1997.. N	N	X	X	116 831
311211111	Commercial dollar exports, all white flour types, made in flour mills	2002.. 7	X	4 368.8	49 851
	1,000 sacks (cwt)	1997.. 7	X	9 266.4	116 831
31121112	All other exports of white flour (including Public Law 480), made in flour mills	2002.. N	X	X	35 254
	1997.. N	N	X	X	D
3112111221	All other exports of white flour (including Public Law 480), made in flour mills	2002.. 4	X	2 436.3	35 254
	1,000 sacks (cwt)	1997.. 1	X	D	D
31121113	Bakers' and institutional white bread-type flours, domestic shipments in bulk cars or trucks, made in flour mills	2002.. N	X	X	1 652 734
	1997.. N	N	X	X	2 162 335
3112111331	Bakers' and institutional white bread-type flours, domestic shipments in bulk cars or trucks, made in flour mills	2002.. 18	X	157 584.2	1 652 734
	1,000 sacks (cwt)	1997.. 20	X	188 662.1	2 162 335
31121114	Bakers' and institutional white bread-type flours, domestic shipments in containers (including tote bins), made in flour mills	2002.. N	X	X	454 275
	1997.. N	N	X	X	D
3112111441	Bakers' and institutional white bread-type flours, domestic shipments in containers (including tote bins), made in flour mills	2002.. 12	X	S	454 275
	1,000 sacks (cwt)	1997.. 12	X	D	D
31121115	Bakers' and institutional soft wheat flour, domestic shipments, made in flour mills	2002.. N	X	X	515 191
	1997.. N	N	X	X	569 559
3112111551	Bakers' and institutional soft wheat flour, domestic shipments in bulk cars or trucks, made in flour mills	2002.. 17	X	P51 958.4	471 268
	1,000 sacks (cwt)	1997.. 22	X	944 987.5	505 675
3112111561	Bakers' and institutional soft wheat flour, domestic shipments in containers (including tote bins), made in flour mills	2002.. 14	X	S	43 923
	1,000 sacks (cwt)	1997.. 16	X	7 790.3	63 884
31121116	Family white flour (except self-rising), domestic shipments, made in flour mills	2002.. N	X	X	558 638
	1997.. N	N	X	X	914 641
3112111671	Family white flour (except self-rising), domestic shipments in containers less than 25 lb, made in flour mills	2002.. 15	X	S	472 238
	1,000 sacks (cwt)	1997.. 20	X	36 003.5	812 492
3112111681	Family white flour (except self-rising), domestic shipments in containers 25 lb or more, made in flour mills	2002.. 18	X	P6 078.5	86 400
	1,000 sacks (cwt)	1997.. 15	X	6 796.2	102 149
31121117	Self-rising family white flour, domestic shipments, made in flour mills	2002.. N	X	X	504 897
	1997.. N	N	X	X	327 902
3112111791	Self-rising family white flour, domestic shipments, made in flour mills	2002.. 14	X	S	106 689
	1,000 sacks (cwt)	1997.. 17	X	1 898.3	178 279
31121117A1	White flour shipped to blenders or other processors for use in food products (mixes, refrigerated doughs, soups, etc.), domestic shipments, made in flour mills	2002.. 11	X	35 728.8	375 639
	1,000 sacks (cwt)	1997.. 13	X	8 781.1	109 615
31121117B1	White flour shipped to blenders or other processors for use in nonfood products (pet food, industrial, etc.), domestic shipments, made in flour mills	2002.. 3	X	1 730.8	22 569
	1,000 sacks (cwt)	1997.. 10	X	P4 284.7	40 008
31121118	Whole wheat, durum, semolina, bulgur, farina, and other wheat flour, except flour mixes, made in flour mills	2002.. N	X	X	563 527
	1997.. N	N	X	X	574 161
31121118C1	Whole wheat flour, made in flour mills ¹	2002.. 22	X	S	290 688
	1,000 sacks (cwt)	1997.. 22	X	D	D
31121118D1	Durum flour and semolina, made in flour mills	2002.. 8	X	15 606.4	189 957
	1,000 sacks (cwt)	1997.. 6	X	P24 197.1	342 893
31121118E1	Bulgur flour, made in flour mills	2002.. 4	X	P2 222.3	29 922
	1,000 sacks (cwt)	1997.. 9	X	3 635.5	77 306
31121118F1	Other wheat flour, including farina, made in flour mills	2002.. 9	X	S	52 960
	1,000 sacks (cwt)	1997.. 6	X	D	D
3112111Y	Wheat flour, except flour mixes, made in flour mills, nsk	2002.. N	X	X	5 523
	1997.. N	N	X	X	3 960
3112111YWV	Wheat flour, except flour mixes, made in flour mills, nsk	2002.. N	X	X	5 523
	1997.. N	N	X	X	3 960
3112114	Wheat mill products, except flour	2002.. N	X	X	532 977
	1997.. N	N	X	X	784 114
31121141	Wheat mill products (including feed, wheat germ, wheat bran, etc.), except flour	2002.. N	X	X	529 944
	1997.. N	N	X	X	771 884
3112114111	Wheat mill feed ¹	2002.. 35	X	99 432.8	426 635
	1,000 s tons	1997.. 41	X	10 720.4	661 053
3112114121	Other wheat mill products (including wheat germ, wheat bran, etc.), except flour and mill feed	2002.. 21	X	1 029.1	103 309
	1,000 s tons	1997.. 30	X	P1 027.8	110 831
3112114Y	Wheat mill products, except flour, nsk	2002.. N	X	X	3 033
	1997.. N	N	X	X	12 230
3112114YWV	Wheat mill products, except flour, nsk	2002.. N	X	X	3 033
	1997.. N	N	X	X	12 230
3112117	Corn mill products	2002.. N	X	X	932 724
	1997.. N	N	X	X	903 232
31121171	Corn mill products	2002.. N	X	X	926 888
	1997.. N	N	X	X	898 412
3112117111	Whole cornmeal for human consumption, made in corn mills	2002.. 18	X	94 162.0	64 111
	1,000 sacks (cwt)	1997.. 14	X	4 273.7	51 171

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
311211	Flour milling—Con.				
3112117	Corn mill products—Con.				
31121171	Corn mill products—Con.				
3112117121	Degermed cornmeal for human consumption, made in corn mills..... 1,000 sacks (cwt) ..2002..	10	X	6 178.8	68 282
	..... 1997..	9	X	6 725.9	55 588
3112117131	Corn grits and hominy (except for brewers' use), for human consumption, made in corn mills 1,000 sacks (cwt) ..2002..	11	X	15 568.6	158 833
	..... 1997..	12	X	13 504.6	188 561
3112117141	Corn grits and flakes for brewers' use, for human consumption, made in corn mills 1,000 sacks (cwt) ..2002..	6	X	^{q1} 503.4	18 265
	..... 1997..	6	X	4 129.2	40 524
3112117151	Hominy feed, cornmeal, and other byproducts of dry corn milling (for animal feed) 1,000 s tons ..2002..	23	X	S	139 022
	..... 1997..	25	X	^{q1} 251.5	141 645
3112117161	Corn flour, made in corn mills 1,000 sacks (cwt) ..2002..	9	X	16 210.7	299 632
	..... 1997..	10	X	S	241 121
3112117171	Other corn mill products, for human consumption 1,000 sacks (cwt) ..2002..	14	X	D	D
	..... 1997..	15	X	D	D
3112117181	Other corn mill products, not for human consumption 1,000 sacks (cwt) ..2002..	3	X	D	D
	..... 1997..	1	X	D	D
3112117Y	Corn mill products, nsk 2002..	N	X	X	5 836
	..... 1997..	N	X	X	4 820
3112117YVV	Corn mill products, nsk 2002..	N	X	X	5 836
	..... 1997..	N	X	X	4 820
311211A	Prepared flour mixes (including refrigerated and frozen doughs and batters), made in flour mills 2002..	N	X	X	471 222
	..... 1997..	N	X	X	517 430
311211A1	Prepared flour mixes (including refrigerated and frozen doughs and batters), made in flour mills 2002..	N	X	X	457 574
	..... 1997..	N	X	X	513 013
311211A111	Pancake and waffle mixes, made in flour mills ² 1,000 sacks (cwt) ..2002..	12	X	S	97 733
	..... 1997..	12	X	S	81 512
311211A121	Cake mixes, including gingerbread, made in flour mills ³ 1,000 sacks (cwt) ..2002..	8	X	^{P1} 512.0	16 151
	..... 1997..	3	X	D	D
311211A131	Biscuit mixes, made in flour mills ⁴ 1,000 sacks (cwt) ..2002..	13	X	S	91 513
	..... 1997..	6	X	D	D
311211A141	Bread and bread-type roll mixes, made in flour mills ⁵ 1,000 sacks (cwt) ..2002..	12	X	S	24 627
	..... 1997..	8	X	D	D
311211A151	Other prepared flour mixes (including cookie, piecrust, doughnut, and other sweet yeast goods mixes), made in flour mills ⁶ 1,000 sacks (cwt) ..2002..	22	X	S	155 971
	..... 1997..	17	X	^{P7} 472.8	166 815
311211A161	Refrigerated doughs and batters (cookie, biscuit, bread and bread-type roll, pasta, pizza, coffeecake, pancake, etc.), made in flour mills ⁷ mil lb. ..2002..	4	X	^{P36.9}	13 619
	..... 1997..	8	X	S	17 422
311211A171	Frozen doughs and batters (cookie, biscuit, bread and bread-type roll, pasta, pizza, coffeecake, pancake, etc.), made in flour mills ⁸ mil lb. ..2002..	7	X	94.5	57 960
	..... 1997..	6	X	148.0	71 477
311211AY	Prepared flour mixes (including refrigerated and frozen doughs and batters), made in flour mills, nsk 2002..	N	X	X	13 648
	..... 1997..	N	X	X	4 417
311211AYVV	Prepared flour mixes (including refrigerated and frozen doughs and batters), made in flour mills, nsk 2002..	N	X	X	13 648
	..... 1997..	N	X	X	4 417
311211B	Other grain mill products 2002..	N	X	X	221 433
	..... 1997..	N	X	X	N
311211B1	Other grain mill products 2002..	N	X	X	221 433
	..... 1997..	N	X	X	N
311211B111	Rye, oat, buckwheat, and other flour, made in grain mills ¹ 1,000 sacks (cwt) ..2002..	18	X	S	138 305
	..... 1997..	N	X	N	N
311211B121	Other mill feed (oats, rye, buckwheat, etc.), made in grain mills ¹ 1,000 sacks (cwt) ..2002..	10	X	S	83 128
	..... 1997..	N	X	N	N
311211B131	Fruit flour, made in grain mills 1,000 s tons ..2002..	—	X	—	—
	..... 1997..	N	X	N	N
311211BY	Other grain mill products, nsk 2002..	N	X	X	—
	..... 1997..	N	X	X	N
311211BYVV	Other grain mill products, nsk 2002..	N	X	X	—
	..... 1997..	N	X	X	N
311211W	Flour milling, nsk, total 2002..	N	X	X	185 511
	..... 1997..	N	X	X	288 702
311211WY	Flour milling, nsk, total 2002..	N	X	X	185 511
	..... 1997..	N	X	X	288 702
311211WYWW	Flour milling, nsk, for nonadministrative-record establishments 2002..	N	X	X	34 826
	..... 1997..	N	X	X	18 168
311211WYWY	Flour milling, nsk, for administrative-record establishments 2002..	N	X	X	150 685
	..... 1997..	N	X	X	270 534

¹For additional detail, see Current Industrial Report MQ311A, Flour Milling

²This product code is primary to more than one industry. See industry 311822, product code 3118220211.

³This product code is primary to more than one industry. See industry 311822, product code 3118220121.

⁴This product code is primary to more than one industry. See industry 311822, product code 3118220231.

⁵This product code is primary to more than one industry. See industry 311822, product code 3118220251.

⁶This product code is primary to more than one industry. See industry 311822, product code 3118220241.

⁷This product code is primary to more than one industry. See industry 311822, product code 3118220261.

⁸This product code is primary to more than one industry. See industry 311822, product code 3118220271.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3112111	Wheat flour, except flour mixes, made in flour mills	
	United States..... 2002..	4 339 890
	..... 1997..	5 146 612
	Michigan..... 2002..	74 096
	..... 1997..	79 937
	Minnesota..... 2002..	317 855
	..... 1997..	417 386
	North Carolina..... 2002..	131 334
	..... 1997..	153 096
	Oklahoma..... 2002..	102 038
	..... 1997..	108 773
	Utah..... 2002..	100 072
	..... 1997..	120 841
	Washington..... 2002..	56 315
	..... 1997..	N
3112114	Wheat mill products, except flour	
	United States..... 2002..	532 977
	..... 1997..	784 114
	Michigan..... 2002..	24 956
	..... 1997..	102 788
	Minnesota..... 2002..	30 101
	..... 1997..	56 181
	North Carolina..... 2002..	12 045
	..... 1997..	12 405
	Oklahoma..... 2002..	48 155
	..... 1997..	N
	Utah..... 2002..	14 279
	..... 1997..	21 511
3112117	Corn mill products	
	United States..... 2002..	932 724
	..... 1997..	903 232
	North Carolina..... 2002..	25 222
	..... 1997..	17 163
311211A	Prepared flour mixes (including refrigerated and frozen doughs and batters), made in flour mills	
	United States..... 2002..	471 222
	..... 1997..	517 430
	North Carolina..... 2002..	9 136
	..... 1997..	N
311211B	Other grain mill products	
	United States..... 2002..	221 433
	..... 1997..	N
	Minnesota..... 2002..	62 115
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
311211	Flour milling		
00900001	Total materials .....2002..	X	4 561 904
	.....1997..	X	5 761 270
11114003	Wheat mil bushels ..2002..	P820.5	3 196 517
	.....1997..	785.0	3 990 970
11115003	Corn mil bushels ..2002..	P123.4	328 647
	.....1997..	Q125.5	453 351
11119911	Barley..... mil bushels ..2002..	Q1.5	5 112
	.....1997..	P1.9	6 538
11119913	Oats mil bushels ..2002..	251.4	57 046
	.....1997..	D	D
11110005	Other grains (excluding wheat, corn, oats, barley, rice (rough), and sorghum) mil bushels ..2002..	P12.6	45 377
	.....1997..	D	D
31121101	Wheat flour 1,000 cwt ..2002..	7 658.8	80 344
	.....1997..	16 424.0	127 929
31100015	Fats and oils mil lb ..2002..	S	22 268
	.....1997..	N	N
31131001	Sugar, cane and beet (sugar solids) 1,000 s tons ..2002..	26.1	13 141
	.....1997..	N	N
32222401	Bags (uncoated paper and multiwall) .....2002..	X	63 645
	.....1997..	X	50 478
31491101	Textile bags (burlap, cotton, polypropylene, etc.) .....2002..	X	11 957
	.....1997..	X	6 106
001900A3	Bags (plastics, foil, and coated paper) .....2002..	X	20 124
	.....1997..	X	N
001900A1	Packaging paper and plastics film, coated and laminated .....2002..	X	18 768
	.....1997..	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	24 388
	.....1997..	X	N
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	339 788
	.....1997..	X	480 517
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	334 782
	.....1997..	X	524 213

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.